



**DESCRIPTION**

- Permanent installation system, selectable single-amp or bi-amp
- Rotatable HF horn provides mounting options

The MK2300 Series of 2-way, high output, trapezoidal loudspeakers are designed as main PA for smaller venues, including houses of worship, auditoriums/theaters, A/V systems, hotel ballrooms, and meeting rooms. The Series is also ideal for distributed or fill purposes in larger venues, including houses of worship, auditorium/theaters, arenas, stadiums, nightclubs, and themed-entertainment complexes.

To meet the design goals for the intended applications, EAW engineers developed a new, high performance, 3-inch voice coil, compression driver mating it to a selection of six different HF horns with patterns from 60° x 45° to 120° x 60°. The horns are as large as the enclosure size allows to maintain consistent directivity throughout the HF passband. A 3-inch voice coil, 12 inch LF driver, was designed to complement the sonic character and output of the HF driver. All MK2300 models are carefully voiced to sound similar, permitting diverse horn patterns to be mixed throughout an installation while maintaining the same sonic quality. The results are cleaner, usable, high-fidelity output to significantly higher levels than is normally expected from loudspeakers of this size and price.

Single-amp and bi-amp operating modes are user-selectable. In single-amp mode, the beamwidth-matching passive crossover is designed for even power response through crossover, low power losses, and high power handling. In bi-amp mode a digital signal processor (DSP) is required, providing sophisticated processing to maximize performance.

Foam-backed grilles hide the drivers from view for pleasing aesthetics. Thirteen mounting points allow enclosures to be mounted in virtually any configuration. Additional mounting points mate with OmniMount® 120.0 Series or similar brackets. Standard colors are black and white. Other colors can be specified as a special order items.

The MK2300 are the smaller companions to the MK5300 Series loudspeakers. Enclosures for both series are the same height facilitating installation where more than one horn pattern and/or type of loudspeaker capability is needed. Six Year Warranty.

**2-WAY FULL-RANGE 90° x 90°**

See *NOTES TABULAR DATA* for details

**CONFIGURATION**

Subsystem		
	Transducer	Loading
LF	1x 12 in cone	Vented
HF	1x 1.4 in exit, 3 in voice coil compression driver	Horn-loaded

Operating Mode		
	Amplifier Channels	External Signal Processing
Single-amp	LF/ HF	High pass filter
Bi-amp	LF, HF	DSP w/2-way filters

**PERFORMANCE <sup>1</sup>**

<b>Operating Range</b>	70 Hz to 20 kHz	
<b>Nominal Beamwidth (rotatable)</b>		
Horz	90°	
Vert	90°	

Axial Sensitivity (whole space SPL)		
LF/HF	97 dB	70 Hz to 20 kHz
LF	97 dB	70 Hz to 1820 Hz
HF	107 dB	1290 Hz to 17 kHz

Input Impedance (ohms)		
	Nominal	Minimum
LF/HF	8	7.2 @ 178 Hz
LF	8	7.1 @ 290 Hz
HF	8	8.5 @ 6050 Hz

High Pass Filter	
High Pass	=>60 Hz, 12 dB/octave Butterworth

Accelerated Life Test <sup>2</sup>		
LF/HF	69 V	600 W @ 8 ohm
LF	69 V	600 W @ 8 ohm
HF	35 V	150 W @ 8 ohm

Calculated Axial Output Limit (whole space SPL)		
	Average	Peak
LF/HF	125 dB	131 dB
LF	125 dB	131 dB
HF	129 dB	135 dB

**ORDERING DATA**

Description	Part Number
MK2399 2-Way Full-Range Loudspeaker Black	0013381
MK2399 2-Way Full-Range Loudspeaker White	0013761
MK2399 2-Way Full-Range Loudspeaker Black-WP	0013787

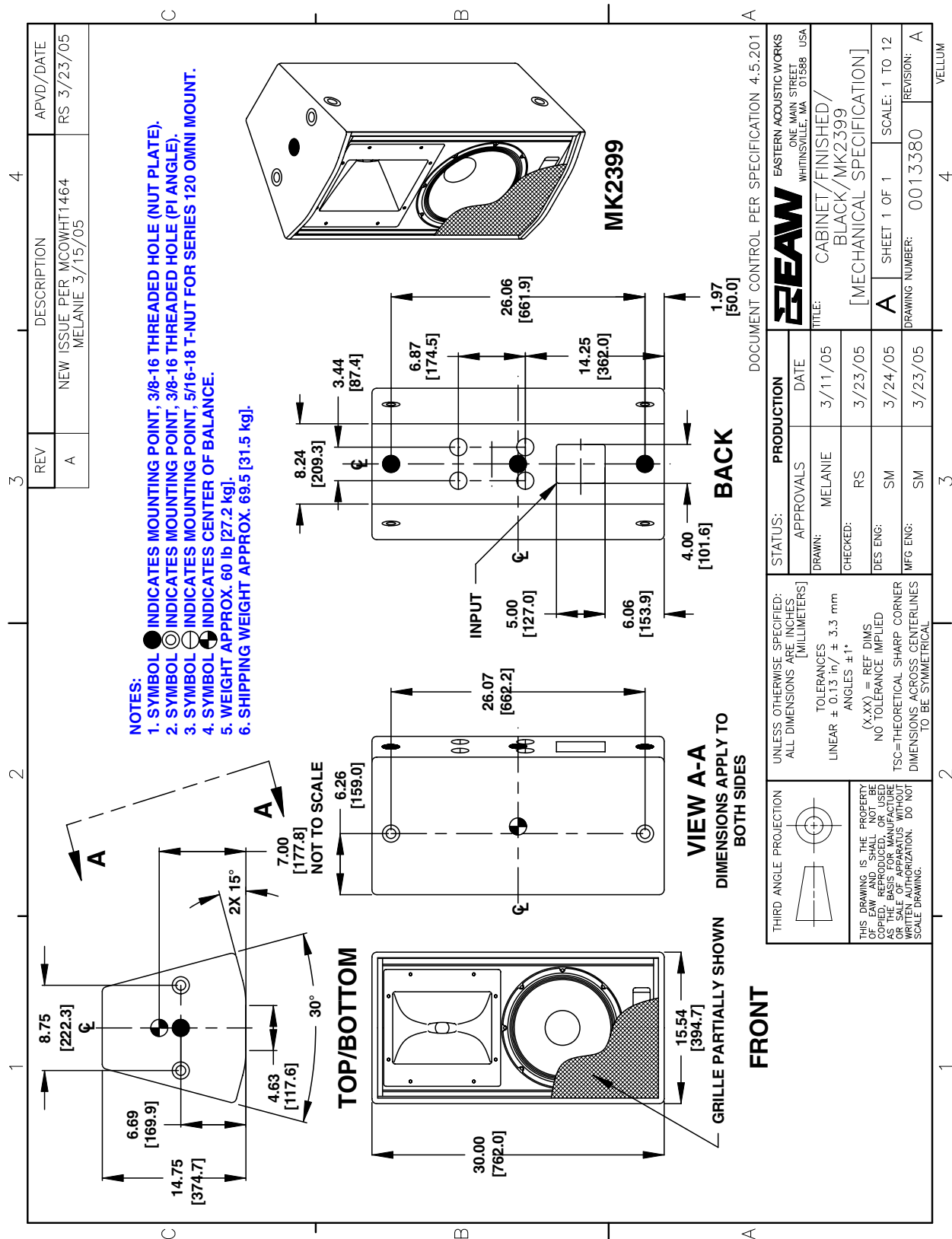
Optional Accessories	
Eyebolt/Forged Shoulder (3/8-16 x 1.25 in)	104001
MK2/5000 U-Bracket Black	0007869
MK2/5000 U-Bracket White	0015076

<sup>1</sup> To achieve specified performance, the listed external signal processing with EAW-provided settings is required.

<sup>2</sup> For recommendations to select power amplifier size refer to: "HOW MUCH AMPLIFIER POWER DO I NEED?" on the EAW web site.

ENCLOSURE

Material	Baltic birch plywood
Finish	Wear resistant textured black paint
Grille	Powder-coated perforated steel



NOTES: This drawing has been reduced. Do not scale.  
For WP version, add 0.25 in / 6.4 mm to the outside dimensions = 0.125 in / 3.2 mm all around.

